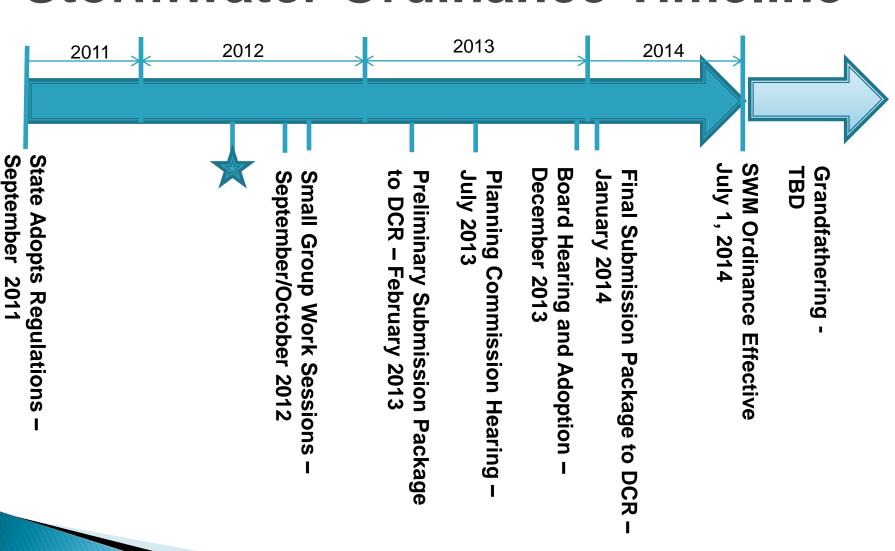
# Fairfax County Stormwater Management Ordinance

Stakeholder Introductory Meeting July 24, 2012

### **Stormwater Ordinance Timeline**



### Agenda

- Stakeholder Goals and Process
- Overview of the Regulations
- Key Issues and Decision-Points
- Questions and Comments
- Next Steps

### Purpose

- Comply with the new Virginia Stormwater Management Regulations
- Identify and consider:
  - Areas where the County has flexibility or may want to adopt more stringent requirements; and,
  - Opportunities to strengthen program coordination and effectiveness.
- Stakeholder feedback will be used to inform changes presented to the Board of Supervisors.

### Stakeholder Input Goals

- 1. Identify **other issues** for discussion and consideration what did we miss?
- 2. Ensure feedback represents a **broad range of interests** and perspectives.
- 3. Keep groups focused to ensure meaningful dialogue.
- 4. Achieve consensus where possible; identify pros and cons where consensus is not possible.

### **Small Group Process**

#### Small Group Issue Workshops

Workshop #1 – **September 24**<sup>th</sup>

Overview of Issues

Issue Teams

Report Out and Feedback

Issue Teams

Report Out

Workshop #2 – October 17<sup>th</sup>

Overview of Issues

Issue Teams

Report Out and Feedback

Issue Teams

Report Out

Large Group/Wrap Up Meeting – January 2013

### **Small Group Organizations**

- Associated Builders and Contractors
- Coalition for Smarter Growth
- Environmental Quality Advisory Committee
- Engineers and Surveyors Institute
- Engineering Standards Review Committee
- Federation of Citizen Associations
- League of Women Voters
- Apartment and Office Building Association

- NAIOP
- Northern Virginia Building Industry Association
- NOVA Soil and Water Conservation District
- NVRC
- Sierra Club
- Tree Commission
- Wetlands Board
- Government Organizations
- Commissions and Councils

## What if I am interested as an individual?

- Individuals can also self-nominate:
  - Interested Citizens
  - Large HOAs/Citizen Associations
  - Stormwater Consultants
  - District Councils
- Self nominations will be accommodated consistent with keeping groups:
  - Manageable
  - Representative

### **Overview of Regulations**

### **Time Line for Adoption**

- Regulations effective 9/13/11.
- Window for adoption 15 − 21 months from effective date, i.e. 12/13/12 − 6/13/13.
- Adoption can be extended to 6/13/14 with approval of the Virginia Soil and Water Conservation Board.
- "Go-live" date for local programs 7/1/14.

### **Overall Purpose of Regulations**

- Maintain, protect, or improve the "physical, chemical, biological, and hydrologic characteristics and the water quality and quantity of the receiving state waters."
- Provide a framework for the implementation and enforcement of the Virginia Stormwater Management Act.
- Delineate the procedures and requirements to be followed in connection with VSMP stormwater construction permits.

### When do the regulations apply?

- Land disturbing activities that disturb one acre or greater.
- The regulations allow for some exemptions:
  - Clearing for agriculture, mining, and similar activities.
  - Single-family residences separately built disturbing less than one acre and not part of a larger common plan of development or sale, including additions or modifications to existing single-family detached residential structures.
  - Land disturbing activities that disturb less than one acre of land area except for activity exceeding an area of 2,500 square feet in Chesapeake Bay Preservation Areas.

### **Impact on Fairfax County**

- Change technical criteria for when and how development will manage stormwater runoff.
- Require changes to County codes and engineering standards.
- Result in changes to plan submittal, review and approval, bonding, inspections, bond release, and maintenance policies and procedures.

### **County Ordinances/Standards**

- New Stormwater Management Ordinance (Chapter 124)
- Pollution of State Waters (Chapter 105) and Storm Drainage (Chapter 106)
- Subdivision Ordinance (Chapter 101)
- Erosion and Sedimentation Control (Chapter 104)
- Zoning Ordinance (Chapter 112)
- Chesapeake Bay Ordinance (Chapter 118)
- Land Development Services Fees (Appendix Q)
- Public Facilities Manual (engineering design standards)

### Other Implementation Activities

- Update plan review and inspection processes.
- Update plans/agreements/waivers tracking system.
- Update inspections tracking system.
- Create an accounting/financial system or a procedure for transferring funds to state.
- Update bonds and agreements procedures.
- Update private maintenance agreement language.
- Update fees.
- Training.
- Develop funding and staffing plan.

### **Key Provisions**

- Water Quality
  - Total Phosphorus still used as benchmark pollutant
  - **Runoff Reduction Method**
  - New Development
  - Redevelopment
  - Offset Provisions
  - Virginia BMP Clearinghouse
- Water Quantity
  - Channel Protection
  - Flood Protection
- Grandfathering
- Plan Submittal Requirements

VIRGINIA SOIL AND WATER CONSERVATION BOARD 4VAC50-60, Stormwater Regulations As adopted on May 24, 2011 (clean version)

2

17

30

31 32

33

Definitions, Purpose, and Applicability 4VAC50-60-10. Definitions

The following words and terms used in this chapter have the following meanings unless the context clearly indicates otherwise

"Act" means the Virginia Stormwater Management Act, Article 1.1 (§ 10.1-603.1 et seq.) of Chapter 6 of Title 10.1 of the Code of Virginia.

"Administrator" means the Administrator of the United States Environmental Protection Agency or an authorized representative.

"Applicable standards and limitations" means all state, interstate, and federal standards and imitations to which a discharge or a related activity is subject under the Clean Water Act (CWA) (33 USC § 1251 et seq.) and the Act, including effluent limitations, water quality standards, standards of performance, toxic effluent standards or prohibitions, best management practices. and standards for sewage sludge use or disposal under §§ 301, 302, 303, 304, 306, 307, 308,

"Approval authority" means the Virginia Soil and Water Conservation Board or its designee. "Approved program" or "approved state" means a state or interstate program that has been approved or authorized by EPA under 40 CFR Part 123 (2000).

"Average monthly discharge limitation" means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

"Average weekly discharge limitation" means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

"Best management practice " or "BMP" means schedules of activities, prohibitions of practices, including both structural and nonstructural practices, maintenance procedures, and other management practices to prevent or reduce the pollution of surface waters and groundwater systems from the impacts of land-disturbing activities.

"Board" means the Virginia Soil and Water Conservation Board

"Bypass" means the intentional diversion of waste streams from any portion of a treatment

"Channel" means a natural or manmade waterway

"Chesapeake Bay Preservation Act Land-Disturbing Activity" means a land-disturbing activity including clearing, grading, or excavation that results in a land disturbance equal to or greater than 2,500 square feet and less than one acre in all areas of jurisdictions designated as subject to the Chesapeake Bay Preservation Area Designation and Management Regulations adopted pursuant to the Chesapeake Bay Preservation Act.

"Chesapeake Bay watershed" means all land areas draining to the following Virginia river basins: Potomac River Basin, James River Basin, Rappahannock River Basin, Chesapeake Bay and its small coastal basins, and York River Basin.

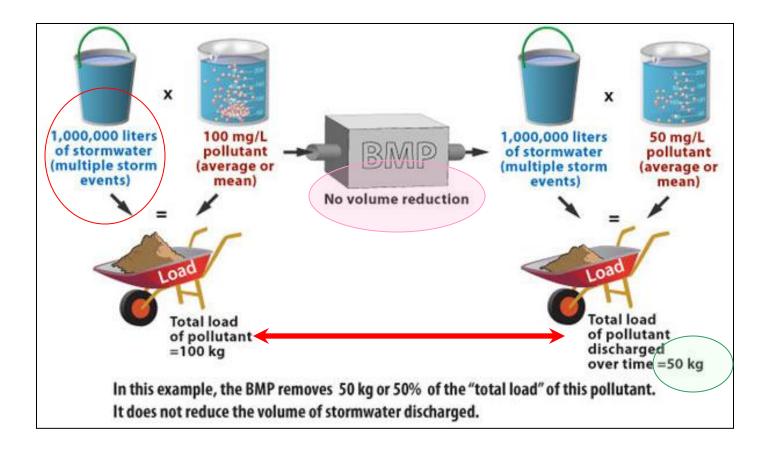
"Common plan of development or sale" means a contiguous area where separate and distinct construction activities may be taking place at different times on different schedules.

"Comprehensive stormwater management plan" means a plan, which may be integrated with other land use plans or regulations, that specifies how the water quality components quantity components, or both of stormwater are to be managed on the basis of an entire

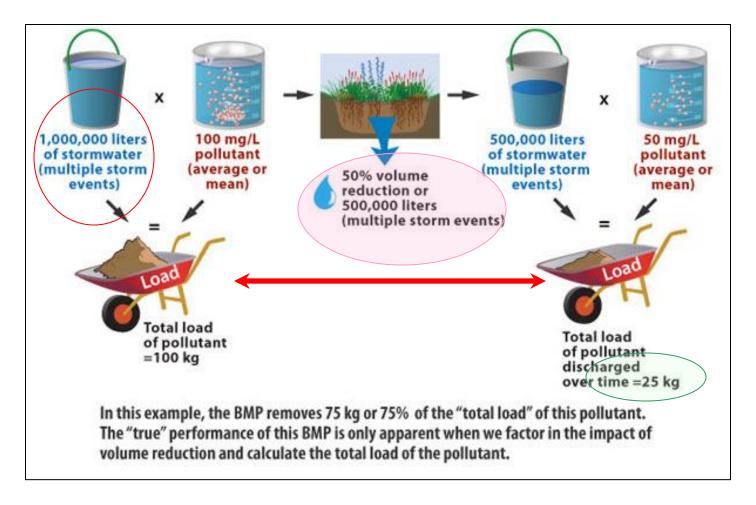
quantity components, or both of stormwater are to be managed on the basis of an entire with other land use plans or regulations, that specifies how the water quality components,

### **Runoff Reduction Method**

- Replaces the Simple Method.
- Determines a BMPs' capacity to capture/reduce the overall volume of runoff as well as mass pollutant removal.
- Goal is to mimic pre-development site hydrology.
- Incorporates built-in incentives for forest preservation and the minimization of impervious surfaces.



- "Traditional" BMP pollutant removal efficiencies do not explicitly take into account the removal that occurs when the runoff volume is reduced.
- Many BMPs, such as ponds and filters, do not reduce runoff volume at all.



- Using BMPs that also provide volume reduction provides greater overall pollutant (mass load) removal.
- ▶ This reflects a "Mass Balance" approach.

### Water Quality Requirements

#### New Development

- 0.41 lbs/ac/yr total phosphorus associated with the Impervious Cover Model.
- Based on 10% impervious cover, 30% turf, and 60% forest.
- The Impervious Cover Model focuses on protecting water quality in local streams.

#### Redevelopment

- 10% reduction < one acre.</li>
- 20% reduction ≥ one acre.
- Backstop: Maximum required reduction 0.41 lbs. phosphorus/acre/ year.

### **Water Quality Offsets**

- Old rules local governments were authorized to allow nutrient offsets under certain circumstances.
- New rules developers are allowed to use offsets under described conditions:
  - Under five acres disturbed;
  - Less than 10 lbs reduction required; or
  - Onsite control of at least 75 percent of the required nutrient reductions.
- Offsets are not allowed for water quantity.

### **Practical Impacts**

- Water quality control requirements are more stringent than current requirements.
- Increase in the number of BMPs required to control stormwater quality.

#### Results:

- Greater difficulty in meeting water quality requirements.
- Better water quality in local streams and the Chesapeake Bay.
- Greater long-term maintenance burden.

### Water Quantity Requirements

#### Channel Protection

 Protection criteria are now situational – manmade, modified, and natural channels.

#### Flood Protection

- Also situational existing localized flooding vs. no existing localized flooding.
- Not well defined for natural channels.
- Less stringent than current County requirements.

#### Increased Sheet Flow

- Must be evaluated can't adversely impact downstream property, cause erosion, sedimentation, or flooding.
- The same as current County requirements.

### **Practical Impacts**

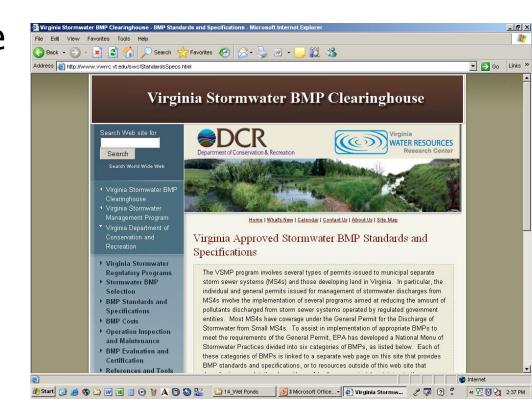
- If new minimum standards are adopted, existing flooding problems would not be addressed.
- State requirements are geared toward providing on-site detention rather than performing downstream analysis to identify inadequacies.

### Grandfathering

- Use <u>current</u> stormwater technical criteria:
  - Plans approved before July 2012 and obtaining a VSMP permit before July 1, 2014.
  - Includes:
    - Proffered or conditional zoning plans
    - Preliminary or final subdivision plats
    - · Preliminary or final site plans
    - · Zonings with a plan of development
- Grandfathering ends June 30, 2019 or termination of permit.

### **BMP Clearinghouse**

- Designs are now standardized in the Virginia BMP Clearinghouse.
- Provides more tools/flexibility.
- Doesn't match County's current PFM.



### Plan Submittal Requirements

- Stormwater Pollution Prevention Plan (SWPPP)
  - Stormwater Plan
  - Erosion and Sediment Control Plan
  - Pollution Prevention Plan
  - Measures to address any TMDL WLA assigned to the construction activities.
- VSMP construction permit registration statement.
  - Not required for development under one acre and not part of larger development plan.
- County will administer VSMP construction permit including plan review and inspections.

### **Additional Proposed Features**

- Some provisions may be more stringent than minimum requirements to:
  - Be consistent with current County requirements.
  - Address County-specific goals.
- Areas of County focus:
  - MS4 permit and Chesapeake Bay TMDL requirements.
  - Process to address non-Bay TMDLs.
  - Enforcement of private stormwater facility maintenance agreements.
  - Enhanced penalties.

### Stakeholder Issues

### **Small Group Issue Areas**

- Single-Family Home Exemptions
- Adequate Outfall Requirements
- Maintenance in Residential Areas
- Restrictions on Use of BMPs
- Facility Inspections by Owners
- Offset Provisions

### Single-Family Home Exemptions

- The Virginia Code allows an exemption for singlefamily properties between 2,500 SF and one acre.
- Small BMPs required under these circumstances are difficult to site, track, and enforce.
- Considerations:
  - Should the County provide an exemption?
  - If so, should it be at a cut off less than one acre (for instance 5,000 SF or greater)?
  - Instead of an exemption, should the properties be required/allowed to purchase offsets?

### **Adequate Outfall and Detention**

- New detention provisions that eliminate the need for a downstream adequacy review are less stringent than current County PFM.
- The Virginia Code allows Fairfax County to establish a more stringent standard.
- Considerations:
  - Should the County adopt the more stringent requirements in the current PFM?

### **BMPs in Residential Areas**

- New requirements favor implementation of smaller facilities on individual lots.
- In general, current practice is to require facilities be placed on out-lots.
- This may create issues and impact lot yield.
- Considerations:
  - Should certain facilities be allowed on individual lots?
  - Who would perform maintenance (County versus HOA versus property owner)?
  - How would enforcement be handled (maintenance agreement versus other restriction)?

### Restrictions on Use of BMPs

- The Virginia Code and BMP Clearinghouse list the types of BMPs that may be used to meet requirements.
- Several are different than what is in the current County PFM or there is no equivalent.
- The County may restrict the use of certain BMPs with written justification.
- Considerations:
  - Should the use of certain BMPs be restricted?
  - What criteria should the County use to determine which BMPs to allow or provisionally allow?

### **Facility Inspections by Owners**

- Virginia Code requires "submission of inspection and maintenance reports" to the County.
- Current practice is for the County to perform a compliance inspection every five years.
- Considerations:
  - What is a reasonable inspection and maintenance report frequency?
  - Should it be different for different BMP classifications?
  - What should be the enforcement requirements?

### **Offset Provisions**

- Virginia Code requires the County to allow nutrient offset credits under certain circumstances.
- The County maintains the ability to allow offsets under other circumstances:
- Considerations:
  - What criteria should the County use for allowing offsets.
     Should it be linked to land use? Ability to assure longterm maintenance?
  - How much does the County want to push offsets versus on-site facilities.

## Who have we missed that should be at the table?

- Associated Builders and Contractors
- Coalition for Smarter Growth
- Environmental Quality Advisory Committee
- Engineers and Surveyors Institute
- Engineering Standards Review Committee
- Federation of Citizen Associations
- League of Women Voters
- Apartment and Office Building Association

- NAIOP
- Northern Virginia Building Industry Association
- NOVA Soil and Water Conservation District
- NVRC
- Sierra Club
- Tree Commission
- Wetlands Board
- Government Organizations
- Commissions and Councils

# Questions and Comments Thank You!

www.fairfaxcounty.gov/dpwes/ stormwaterordinance.htm